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09/470,871	12/23/1999	HENRY C. YUEN	YUN-12802/03	6718

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EXAMINER

NGUYEN, LE V

ART UNIT

PAPER NUMBER

2174

DATE MAILED: 08/14/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/470,871

Applicant(s)

YUEN, HENRY C. *nk*

Examiner

Le Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Oath/Declaration***

1. It is noted that a non-initialed and/or non-dated alterations has been made to the oath or declaration. See 37 CFR 1.52(c). Appropriate correction is required.

### ***Specification***

2. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited.

3. The disclosure is objected to because of the following informalities:

- a) Page 2, line 1: the phrase "no such as proximity" appears to contain a grammatical error. Applicant is reminded of the proper language and format for an abstract of the disclosure.

- b) The specification is objected to because of the following informalities: the detailed description of the invention recites the limitation "The icons" in line 18 of page 4. There is insufficient antecedent basis for this limitation in the claim.

- c) Page 6, lines 9-10: the phrase "Metrics may be used to rearrange the reference points particular to a given person is created" needs to be rephrased to improve clarity.

- d) Page 15, line 2: the phrase "One possible element is distinguish" appears to contain a grammatical error. Applicant is reminded of the proper language and format for an abstract of the disclosure.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

5. Claims 1-4, and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Matsuda (“Matsuda”, US # 6,346,956).

As per independent claim 1, Matsuda teaches a method of user interaction on the world-wide web, comprising the steps of:

defining/displaying a virtual world using at least one web site, the virtual world including a virtual geographic terrain with a set of virtual locations to a plurality of visitors to the virtual world (col. 6, lines 54-62, *virtual locations such as Tokyo or New York with geographic terrain consisting of buildings and roads*), each being interconnected to the web site through the world-wide web (col. 27, lines 63-65);

identifying each visitor to the virtual world with a symbol superimposed on the geographic terrain (col. 3, lines 10-13, *an avatar representing the user is capable of moving around the virtual space or geographic terrain*) ;

providing a facility whereby visitors may traverse virtual geographic terrain and visit virtual locations by moving the symbols (col. 26, lines 21-51, *detailed description of moving around in the three-dimensional space*); and

establishing a common metric (*shared space*) with respect to each visitor, enabling one visitor to interact with another visitor in accordance with the metric (col. 28, lines 19-21 *users in a shared space play catch*).

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As per claims 2 and 3, Matsuda teaches the step of defining a spatial perspective within the virtual world using one or more vanishing points (fig. 10, *a vanishing point behind avatar D is used to give the perception of depth*) wherein different visitors see the virtual world from a different perspective (figs. 10 & 11 *and respective portions of the specification describes a view seen from avatar C and a view seen from avatar D*).

As per claim 4, Matsuda teaches the method of user interaction wherein the virtual locations include one or more virtual commercial enterprises offering goods or services for purchase by the visitors (col. 13, lines 7-10).

As per claim 8, Matsuda teaches the method of user interaction wherein the interaction between two visitors is textual (col. 28, lines 4-18).

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda ("Matsuda", US # 6,346,956) in view of Cheng (US # 6,396,509).

As per claims 5 and 6, Matsuda teaches the step wherein the avatar of the user can change his/her setting preferences inside the virtual world (col. 3, lines 10-13). However, Matsuda does not teach the step of using the visitor/avatar preferences to determine the level of interaction between two visitors/avatars. Cheng teaches a virtual environment wherein a profile

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is used in the consideration process of communication between avatars (col. 21, lines 27-29). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Cheng's teaching of using preferences as a factor in determining level of interaction to Matsuda. The motivation for the combination is to save time by glancing through a profile to determine whether communication is desirable.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda ("Matsuda", US # 6,346,956) in view of Brady et al. ("Brady", US # 5,434,927).

Matsuda teaches a virtual world wherein a visitor may traverse within the virtual world and update his/her current location. Matsuda does not teach that this updating process allows predicting a next location. Brady teaches a method for tracking objects in 3-D space wherein potential future positions are predicted (col. 4, lines 30-34). It would have been obvious to an artisan at the time the invention was made to combine Matsuda's teaching with Brady's method in order to improve response time. However, the method of Matsuda and Brady still does not explicitly disclose the use of cache memory. Official notice is given that the use of cache memory was well known in the art at the time of the invention. It would have been obvious to an artisan at the time of the invention to include the use of this feature with the method of Matsuda and Brady in order to provide users quick access to data resulting in a more immediate presentation of the next location.

9. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda ("Matsuda", US # 6,346,956) in view of Leahy et al. ("Leahy" US # 6,219,045).

Matsuda teaches a user interaction method allowing participants to communicate with each other audibly (col. 12, lines 17-29). However, Matsuda does not disclose communication

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among participants to be communication among visitors. Leahy teaches a virtual world wherein the communication between two avatars, being all visitors, is audible (col. 4, lines 59-62). It would have been obvious to an artisan at the time the invention was made to combine Leahy's teaching with Matsuda's method to allow visitors capabilities of exchanging ideas/information.

10. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda ("Matsuda", US # 6,346,956) in view of Redmann et al. ("Redman", US # 5,696,892).

Matsuda teaches the symbol for a visitor is a person (figs. 10-11, *D and C respectively*). Matsuda does not teach whether the person is a real-life graphical representation of that visitor. Redman teaches a virtual reality environment with realistically portrayed, photo-likeness of a real-world person (col. 4, lines 40-44). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Redmann's teaching of photo-likeness of a person in a virtual world to Matsuda. Motivation for the combination is a design preference wherein a user prefers a more realistic representation of himself/herself.

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Brady et al. (US. # 5,761,326) teaches a method and apparatus for machine vision classification and tracking.

Honda (US # 6,020,885) teaches a three-dimensional virtual reality space sharing method and system using local and global object identification codes.

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Matsui et al. (US # 5,761,326) teaches a method and apparatus for machine vision classification and tracking.

Suzuki et al. (US # 5,7361,982) teaches a virtual space apparatus with avatars and speech.

*Inquires*

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lê Nguyen whose telephone number is (703) 305-7601. The examiner can normally be reached on Monday - Friday from 8:00 am to 5:00 pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid, can be reached on (703) 308-0640.

The fax number for the organization where this application or proceeding is assigned are as follows:

(703) 746-7238 [After Final Communication]

(703) 746-7239 [Official Communication]

(703) 746-7240 [For status inquiries, Draft Communication]

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Lê Nguyen  
Patent Examiner  
August 9, 2002

*Kristine Kincaid*  
KRISTINE KINCAID  
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